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Samuel H. Dworetsky
AT&T CORP.
P.O. Box 4110
Middletown, NJ 07748-4110

EXAMINER

KIANERSI, MITRA

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,323

Applicant(s)

GARRETT ET AL.

Examiner

mitra kianersi

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/20/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2143

Claims 1-15 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US. Patent No. 6,535,493).

1. As per claim 1, a method of operating a router in an access network infrastructure connected to a plurality of service networks, comprising the steps of: receiving an incoming packet with a source address, (the mobile unit by sending an agent advertisement packet from the access point. Abstract) comparing the source address of the incoming packet to network addresses allocated to subscribers of services provided by a service network; and if the source address matches a network address allocated to subscribers of services provided by the service network, forwarding the packet to a router in the service network. (compares the IP destination address to its mobility binding list to see if the address matches with one of its registered mobile units, col 10, lines 4-6) and forwarding the packet to a router in the first service network;(if a match is found, the foreign agent forwards the decapsulated datagram to the mobile unit. Col 10, lines 10-12)
2. As per claims 3, wherein the service networks utilize the Internet Protocol and wherein the addresses are Internet Protocol addresses. (the ARP response is sent to

the MU with a default address of the current AP's Internet Protocol address in step 460, col 12, lines 49-51).

3. As per claim 6, wherein the access network infrastructure comprises a hybrid fiber coaxial network. (fiber-distributed data interface (FDDI), col 11, line 7)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent No. 6,535,493) and further in view of Forslow (US Patent No. 6,608,832).

4. As per claim 8, Lee et al. teach a method of operating an access network infrastructure comprising a plurality of routers and connected to a plurality of service networks, Lee et al. fail to teach using destination-based routing at the routers in the access network infrastructure except at one or more managed access point routers having a connections to routers in the plurality of service networks. And using policy-based routing at the managed access point routers so that packets having a source address allocated to subscribers of services provided any a service network will be forwarded to a router in the service network. However, Forslow, teach a method that relates to mobile communications, and more particularly, to different services and features that may be employed to establish and enhance communications between a mobile station in a mobile communications network and an external network entity. Forslow also on col 7, lines 22-24 teach the common access procedure employs a common configuration procedure for configuring the mobile station with the external

network entity. And on col 19, lines 65-67 teach that the ISP 130 uses the subnet mask and giaddr to route a response back to the GGSN, which in turn, forwards the response to the mobile station based on the agent remote ID.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a mobile communications network and an external network with selectable packet-switched and circuit-switched and circuit-switched services disclosed by Forslow with Lee's method of operating a router in an access network in order to provide enhanced and efficient applications to end users at lower cost.

5. As per claims 2 and 12, Forslow teach a method wherein the source address of the incoming packet is assigned to a network access device associated with the subscriber of services provided by the service network. (The IP configuration includes assigning a network layer (IP) address to the mobile station, setting default values for worldwide web (WWW) server, domain name server (DNS), an address resolution protocol (ARP) cache, etc. col 9, lines 29-32)

6. As per claim 4, Lee et al. teach a method of operating a router in an access network connected to a plurality of service networks. Lee et al. fail to teach the pluralities of service networks are operated by different Internet Service Providers. However, Forslow, in abstract teach a method that relates to mobile communications, and more particularly, to different services and features that may be employed to establish and enhance communications between a mobile station in a mobile communications network and an external network entity. Forslow also on col 5, lines 61-65, teach a bearer that "bears" or carries information from the mobile station through the mobile communications network towards the external network entity and carries information from the external network entity through the mobile communications network to the mobile station. Alternatively, the header of each information packet in an application flow may specify a generally recognized class of service which when read determines whether a circuit-switched bearer or a packet-switched bearer carries that packet (the differential services approach, col 6, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a mobile communications network and an external network with selectable packet-switched and circuit-switched and circuit-switched services disclosed by Forslow with Lee's method of operating a router in an access network in order to provide enhanced and efficient applications to end users at lower cost.

7. As per claim 5, Lee et al. teach a method of operating a router in an access network connected to a plurality of service networks. Lee et al. fail to teach the wherein the plurality of service networks offer access to different Internet Protocol-based services. However, Forslow, teach the Internet protocol (IP) is used as the backbone to transfer data packets, col 3, lines 33-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a mobile communications network and an external network with selectable packet-switched and circuit-switched and circuit-switched services disclosed by Forslow with Lee's method of operating a router in an access network in order to provide enhanced and efficient applications to end users at lower cost.

8. As per claim 7, Lee et al. teach a method of operating a router in an access network connected to a plurality of service networks. Lee et al. fail to teach wherein the source address of the incoming packet identifies a network access device attached to the hybrid fiber coaxial network with a cable modem. However, Forslow teach a circuit-switched bearer like a V.110 modem, col 12, lines 13-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a mobile communications network and an external network with selectable packet-switched and circuit-switched and circuit-switched services disclosed by Forslow with Lee's method of operating a router in an access network in order to provide enhanced and efficient applications to end users at lower cost.

9. As per claim 9, Forslow teach a method wherein packets between network access devices connected to the access network infrastructure are routed in the access

Art Unit: 2143

network infrastructure using destination-based routing without being forwarded to a service network. (In a connectionless data packet communication between the mobile host 12 and fixed terminal 18, packets are routed from the source to the destination independently and do not necessarily follow the same path. Col 2, lines 25-30)

10. As per claim 10, Forslow teach a method wherein the access network infrastructure provides access to local services. ((In a connectionless data packet communication between the mobile host 12 and fixed terminal 18, packets are routed from the source to the destination independently and do not necessarily follow the same path . Col 2, lines 25-30)

11. As per claim 11, Forslow teach a method wherein packets associated with the local services are routed in the access network infrastructure using destination-based routing without being forwarded to a service network. (In a connectionless data packet communication between the mobile host 12 and fixed terminal 18, packets are routed from the source to the destination independently and do not necessarily follow the same path ,Col 2, lines 25-30)

12. As per claim 13, Forslow teach a method wherein the service networks utilize the Internet Protocol and wherein the addresses are Internet Protocol addresses. (the Internet protocol (IP), col 3, lines 33-34)

13. As per claim 14, Forslow teach a method wherein the plurality of service networks are operated by different Internet Service Providers. (send packet data to an external network like an Internet service provider (ISP) 58 shown in FIG. 2, col 3, lines 53-55)


14. As per claim 15, Forslow teach a method wherein the plurality of service networks offer access to different Internet Protocol-based services. (the Internet protocol (IP), col 3, lines 33-34)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Mitra Kianersi
July/07/2004



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100